

Amendment and Response

Applicant: Ralf Otremba

Serial No.: 10/767,706

Filed: January 29, 2004

Docket No.: I434.102.101/IFT979US

Title: SEMICONDUCTOR COMPONENT HAVING AT LEAST TWO CHIPS WHICH ARE INTEGRATED IN A HOUSING AND WITH WHICH CONTACT IS MADE BY A COMMON CONTACT CHIP

IN THE CLAIMS

Please add claim 19.

Please amend claims 1, 4, 5, 10, and 16 as follows:

1. (Currently Amended) A semiconductor component comprising:

a housing;

at least two semiconductor chips arranged in the housing, wherein each chip has a front side and a rear side and wherein each chip has at least one contact area at the front or rear side; and

at least one contact clip within the housing, which projects from the housing, which has a plate-type section with a first and a second connection area that are opposite one another, and which makes contact with at least two of the chips, its first connection area being applied to the contact area of ~~at least one~~ a first of the at least two chips and its second connection area being applied to the contact area of ~~at least another~~ a second of the at least two chips, wherein the contact clip electrically connects the contact area of the first of the at least two chips and the second of the at least two chips.

2. (Original) The semiconductor of claim 1, wherein each chip has at least one contact area at the front and rear side.

3. (Original) The semiconductor component of claim 1, wherein the housing has a top side and an underside, the areas of which are greater than remaining front and rear side areas of the housing, the at least two chips being accommodated in the housing in such a way that their front and rear sides are at least approximately perpendicular to the top side and underside.

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4. (Currently Amended) The semiconductor component of claim 23, wherein the at least one contact clip exits from the housing at a side adjoining the underside and has a bent section which, below the underside, forms a connection contact.
5. (Currently Amended) The semiconductor component of claim 23, wherein the at least one contact clip exits from the housing at the underside.
6. (Original) The semiconductor component of claim 1, wherein power transistors are integrated in the at least two chips, which in each case have three contact areas: a gate contact area, a source contact area and a drain contact area.
7. (Original) The semiconductor component of claim 6, wherein the gate contact areas and the source contact areas are formed in each case at the front side and the drain contact areas are formed in each case at the rear side of the chips.
8. (Original) The semiconductor component of claim 1, wherein the at least one contact clip makes contact with contact areas either at the rear sides or at the front sides of the at least two chips.
9. (Original) The semiconductor component of claim 1, wherein the at least one contact clip makes contact with a contact area at the front side of the at least one of the chips and at the rear side of the at least one other of the chips.
10. (Currently Amended) A semiconductor component comprising:
 - a housing with a top side, an underside, a first side, and a second side;
 - a first semiconductor chip configured within the housing, the first semiconductor chip having a front side, a rear side, and a contact area at the front side;

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a second semiconductor chip configured within the housing, the second semiconductor chip having a front side, a rear side, and a contact area at the front side; and

a contact clip within the housing, wherein the contact clip projects from the housing and has a plate-type section with a first connection area and a second connection area opposite the first connection area, wherein the first connection area makes contact with the contact area of the first semiconductor chip, ~~and wherein the second connection area is applied to the contact area of the second semiconductor chip, and wherein the contact clip electrically connects the contact area of the first semiconductor chip and the contact area of the second semiconductor chip.~~

11. (Original) The semiconductor component of claim 10 wherein the area of the top side and underside of the housing is greater than the area of the sides of the housing and wherein the first and second semiconductor chips are accommodated in the housing such that their front and rear sides are approximately perpendicular to the top side and underside of the housing.

12. (Original) The semiconductor component of claim 12, wherein the contact clip exits from the housing at a first side and includes a bent section which, below the underside, forms a connection contact.

13. (Original) The semiconductor component of claim 12, wherein the contact clip exits from the housing at the underside.

14. (Original) The semiconductor component of claim 1, wherein power transistors are integrated in the first and second semiconductor chips, and wherein each power transistor has a gate contact area, a source contact area, and a drain contact area.

15. (Original) The semiconductor component of claim 14, wherein the gate contact areas and the source contact areas are formed at the front side and the drain contact areas are formed at the rear side of the semiconductor chips.

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16. (Currently Amended) A semiconductor component comprising:

- a housing with a top side, an underside, a first side, and a second side;
- a first semiconductor chip configured within the housing, the first semiconductor chip having a front side, a rear side, and a contact area;
- a second semiconductor chip configured within the housing, the second semiconductor chip having a front side, a rear side, and a contact area; and
- a contact clip within the housing, wherein the contact clip projects from the housing and has a plate-type section with a first connection area and a second connection area opposite the first connection area, wherein the first connection area makes contact with the contact area of the first semiconductor chip, ~~and wherein the second connection area is applied to the contact area of the second semiconductor chip, and wherein the contact clip electrically connects the contact area of the first semiconductor chip and the contact area of the second semiconductor chip.~~

17. (Original) The semiconductor component of claim 16, wherein the contact area of the first semiconductor is at the front side and the contact area of the second semiconductor is at the rear side.

18. (Original) The semiconductor component of claim 16, wherein the contact area of the first semiconductor is at the rear side and the contact area of the second semiconductor is at the rear side.

19. (New) A semiconductor component comprising:

- a housing with a top side, an underside, a first side, and a second side;
- a first semiconductor chip configured within the housing, the first semiconductor chip having a front side, a rear side, and a contact area;
- a second semiconductor chip configured within the housing, the second semiconductor chip having a front side, a rear side, and a contact area; and

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means projecting from the housing for making contact between the contact area of the first semiconductor chip and the contact area of the second semiconductor chip such that the contact areas of the first and second chips are electrically coupled.